

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Laura Reid

Group Art Unit No.: 2614

Serial No.: 10/653,670

Examiner: Quynh Nguyen

Filed: September 2, 2003

Confirmation No.: 4580

For: METHODS, APPARATUS AND COMPUTER PROGRAM PRODUCTS FOR
ROUTING PHONE CALLS TO A PSTN OR A PACKET SWITCHED NETWORK
BASED ON CALLED NUMBER

March 9, 2007

MS AF

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

**REASONS IN SUPPORT OF APPLICANT'S
PRE-APPEAL BRIEF REQUEST FOR REVIEW**

This document is submitted in support of the Pre-Appeal Brief Request for Review that is filed concurrently herewith along with a Notice of Appeal in compliance with 37 C.F.R. 41.31. Applicant requests a Pre-Appeal Brief Review of the claims finally rejected in the Final Office Action mailed December 19, 2006 ("Final Office Action").

In the interest of brevity and without waiving the right to argue additional grounds should this Petition be denied, Applicant will only discuss the patentability of independent Claims 4 and 16. Claims 4 and 16 have been finally rejected under 35 U.S.C. §103(a) as being unpatentable over United States Patent No. 6,665,293 to Thornton et al. ("Thornton") in view of U.S. Published Application 2003/0002479 to Vortman et al. ("Vortman") and further in view of U.S. Published Application 2004/0240430 to Lin et al. ("Lin").

Independent Claim 4 recites (emphasis added):

4. A method of routing phone calls in a communication system, the method comprising:

within a phone network interface, selectively carrying out based on a called number to which a phone call is directed: 1) routing the phone call received as an analog signal from a phone through an analog phone line for communication to a local access phone provider and across a public switched telephone network (PSTN); **or 2)** converting the analog phone call signal to a digital Voice-Over-Internet-Protocol (VoIP) phone call signal and routing the digital VoIP phone call signal to a broadband network modem device for communication to a local access Internet provider and across a packet switched network.

Accordingly, a **phone network interface** responds to a called number by either routing a phone call as an analog phone call signal from a phone through an analog phone line for communication to a local access phone provider, **or** converting the analog phone call

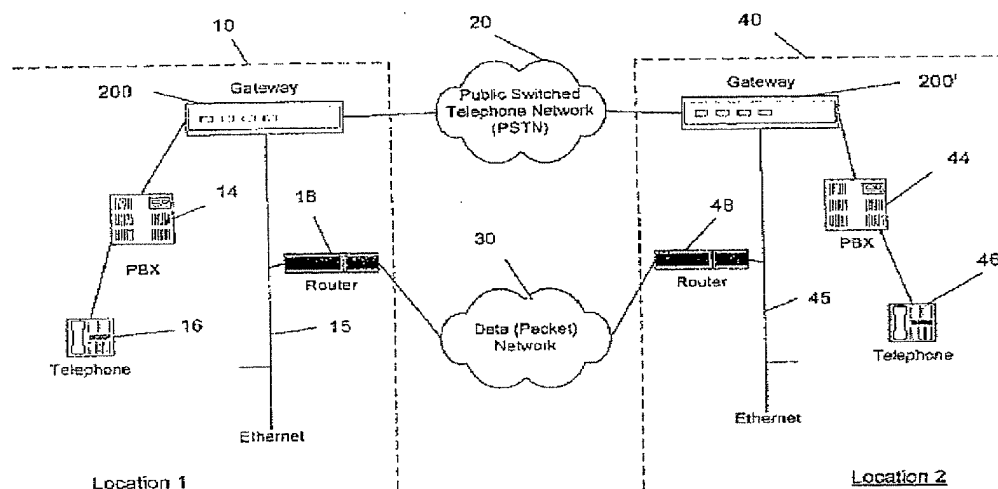
signal to a digital VoIP phone call signal which it routes to a broadband network modem device for communication to a local access Internet provider and across a packet switched network. It is further noted that, the phone network interface is outside the local access phone provider and the local access Internet provider.

An exemplary embodiment of Claim 4 is shown by Figure 1 in which the phone network interface 100 can reside in a user's home and route a 911 emergency phone call from the phone 100 as an analog call to the local access phone provider 122 and PSTN 130 and to a "911 emergency response center" 150, and can convert other phone calls into VoIP phone calls routed through the broadband access device 114, local access Internet provider 124, and Internet 140, to a VoIP provider 160.

Applicant submits that Thornton does not disclose at least the recitations of Claim 4 of a **phone network interface that responds to a called number to which a phone call is directed by selectively carrying out: 1) routing a phone call as an analog phone call signal** from a phone through an analog phone line for communication to a local access phone provider, **or 2) converting the analog phone call signal to a digital VoIP phone call signal** which it routes to a broadband network modem device for communication to a local access Internet provider and across a packet switched network.

Thornton shows in FIG. 1, below, and describes relative thereto that telephone 16 is connected to a local access phone provider that includes private branch exchanges (PBX) 14 and 44, PSTN 20, a data (packet) network 30, and gateways 200 and 200'.

FIG. 1 of Thornton



The PBX 14 performs incoming call termination (terminating an analog incoming call and generating a digital outgoing call) from telephone 16 and outgoing line selection through the gateway 200 to a central office for tens, hundreds or thousands of telephones (one which

is shown as 16). (Thornton, Col. 10, lines 5-30). The gateway 200 is "situated between PBX 14 and the PSTN". (Thornton, Col. 10, lines 52-58). Accordingly, as shown in FIG. 1, the gateway 200 interconnects the PBX 14 network with the PSTN 20 and data network 30. This is consistent with the definition provided by Microsoft Press Computer Dictionary, Third Edition, for the phrase "gateway" as "a device that connects networks using different communications protocols so that information can be passed from one to the other."

Thornton further describes that the PBX 14 terminates the call from the phone 16 and generates therefrom a digital signal that is communicated to the gateway 200 and, consequently, the gateway 200 routes a digitized phone call from the PBX 14 to the PSTN 20. More particularly, Thornton describes the PBX 14 as follows:

PBX 14 would select an outgoing telephone line to a central office switch (for a relatively large PBX, this amounts to selecting an available time slot in an outgoing, e.g., T1 trunk).
(Thornton, Col. 10, lines 28-31, emphasis added).

Accordingly, the PBX 14 converts all analog phone signals into digital signals that are communicated via slots within a digital time multiplexed protocol for a T1 trunk. The PBX 14 does not selectively choose between carrying out that conversion and not carrying out that conversion based on the called telephone number.

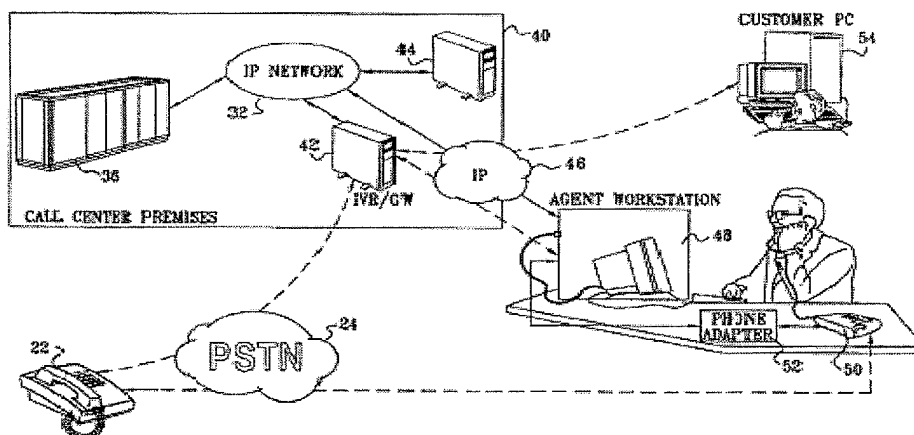
Thornton describes that the gateway 200 selectively routes a phone call through the PSTN 20 or as a VoIP call through the data network 30. (Thornton, Col. 6, lines 63-67). However, the gateway 200 selectively routes only **digital** phone call signals received from the PBX 14 based on the called number. The gateway 200 does not selectively choose between converting and not converting an analog phone call signal to a digital VoIP phone call signal and routing that signal to a broadband network modem device based on the called telephone number.

Moreover, the PBX 14 and the gateway 200 are both within a local access phone provider, as the Final Office Action concedes on page 10. Consequently, neither the PBX 14 nor the gateway 200 responds to a called number by selectively carrying out 1) routing a phone call as an analog phone call signal from a phone through an analog phone line for communication to a local access phone provider, or 2) converting the analog phone call signal to a digital VoIP phone call signal which it routes to a broadband network modem device for communication to a local access Internet provider and across a packet switched network.

Moreover, as conceded by the Final Office Action on page 4, Thornton does not disclose a broadband network modem device.

The Final Office Action on page 4 cites Vortman for its description of "routing an analog signal through an analog phone line to a local access phone (figs. 2 and 3; page 2, para. 9)." The phone adapter 52 of Vortman functions as a simple switch that selectively connects a smartphone 92 within a workstation 48 or a POTS phone 50 to a phone line 70. Vortman describes in paragraph 9 regarding FIG. 2 (below), that a "routing server in the call center" within the call center premises 40 of a local access phone provider can route calls between the PSTN and the Internet.

FIG. 2 of Vortman



Nowhere does Vortman describe or suggest that the phone adapter 52 or any other component can function as a phone network interface that selectively carries out based on a called number: 1) routing a phone call as an analog phone call signal from a phone through an analog phone line for communication to a local access phone provider, or 2) converting the analog phone call signal to a digital VoIP phone call signal which it routes to a broadband network modem device for communication to a local access Internet provider and across a packet switched network.

The Office Action on page 5 cites Lin only for its general description of a cable modem and a DSL modem.

Consequently, Applicant submits that Thornton, Vortman, and Lin if combined do not disclose at least the recitations of Claim 4 of a phone network interface that responds to a called number to which a phone call is directed by selectively carrying out: 1) routing a phone call as an analog phone call signal from a phone through an analog phone line for communication to a local access phone provider, or 2) converting the analog phone call signal to a digital VoIP phone call signal which it routes to a broadband network modem device for communication to a local access Internet provider and across a packet switched network.

Claim 16 includes similar recitations to Claim 4 and is submitted to be patentable over Thornton in view of Vortman and Lin for at least the reasons explained above for Claim 4.

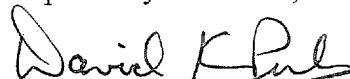
Moreover, Claim 16 provides further bases for patentability over Thornton, Vortman, and Lin. In Claim 16, the controller receives the analog phone call signal through the phone interface from a phone, and selective routes that analog phone call signal through the PSTN interface via an analog phone call line to a local access phone provider, or converts the analog phone call signal into a digital VoIP phone call signal which it routes through the Internet interface to the broadband network interface device to the local access Internet provider.

The Final Office Action concedes on page 8 that Thornton does not disclose these highlighted recitations of Claim 16, but then cites the phone adapter 52 of Vortman. As explained above, nowhere does Vortman describe or suggest that the phone adapter 52 selectively: 1) routes an analog phone call signal through a PSTN interface via an analog phone call line to a local access phone provider; or 2) converts the analog phone call signal into a digital VoIP phone call signal which it routes through an Internet interface to a broadband network interface device to a local access Internet provider. Again, as was explained above with regard to Claim 4, Vortman briefly describes that a "routing server in the call center" within the call center premises 40 of a local access phone provider can route calls between the PSTN and the Internet. Consequently, Vortman does not supply the above recitations of Claim 16 that are missing from Thornton and Lin.

For at least these reasons, Claim 16 is submitted to be patentable over Thornton in view of Vortman and Lin.

Accordingly, Applicant respectfully requests withdrawal of all rejections and the allowance of all claims in due course. In the event an extension of time is necessary to allow consideration of this paper, such an extension is hereby petitioned under 37 C.F.R. §1.136(a) and any additional fees may be charged to our Deposit Account No. 50-0220.

Respectfully submitted,

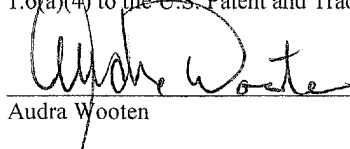


David K. Purks (Registration No. 40,133)

USPTO Customer No. 39072

CERTIFICATION OF TRANSMISSION

I hereby certify that this correspondence is being transmitted via the Office electronic filing system in accordance with § 1.6(a)(4) to the U.S. Patent and Trademark Office on March 9, 2007.


Audra Wooten